

## CHAPTER 5C. WARNING SIGNS

### Section 5C.01 Introduction

Support:

- 01 The purpose of a warning sign is to provide advance warning to the road user of unexpected conditions on or adjacent to the roadway that might not be readily apparent.
- 02 The provisions for warning signs are contained in Chapter 2C and in other Sections of this Manual. Provisions for warning signs that are specific to low-volume roads are contained in this Chapter.

### Section 5C.02 Horizontal Alignment Signs (W1-1 through W1-8)

Support:

- 01 Horizontal Alignment signs (see Sections 2C.06 through 2C.12 and Figure 5C-1) include turn, curve, reverse turn, reverse curve, winding road, large arrow, and chevron alignment signs.

Option:

- 02 Horizontal Alignment signs may be used where engineering judgment indicates a need to inform the road user of a change in the horizontal alignment of the roadway.

### Section 5C.03 Intersection Warning Signs (W2-1 through W2-6)

Support:

- 01 Intersection signs (see Figure 5C-1) include the crossroad, side road, T-symbol, Y-symbol, and circular intersection signs.

Option:

- 02 Intersection signs may be used where engineering judgment indicates a need to inform the road user in advance of an intersection.

### Section 5C.04 Stop Ahead and Yield Ahead Signs (W3-1, W3-2)

Standard:

- 01 A Stop Ahead (W3-1) sign (see Figure 5C-2) shall be used where a STOP sign is not visible for a sufficient distance to permit the road user to bring the vehicle to a stop at the STOP sign.
- 02 A Yield Ahead (W3-2) sign (see Figure 5C-2) shall be used where a YIELD sign is not visible for a sufficient distance to permit the road user to bring the vehicle to a stop, if necessary, at the YIELD sign.

### Section 5C.05 NARROW BRIDGE Sign (W5-2)

Option:

- 01 The NARROW BRIDGE (W5-2) sign (see Figure 5C-2) may be used on an approach to a bridge or culvert that has a clear width less than that of the approach roadway.

### Section 5C.06 ONE LANE BRIDGE Sign (W5-3)

Guidance:

- 01 A ONE LANE BRIDGE (W5-3) sign (see Figure 5C-2) should be used on low-volume two-way roadways in advance of any bridge or culvert:
  - A. Having a clear roadway width of less than 16 feet, or
  - B. Having a clear roadway width of less than 18 feet when commercial vehicles constitute a high proportion of the traffic, or
  - C. Having a clear roadway width of 18 feet or less where the approach sight distance is limited on the approach to the structure.

Option:

- 02 Roadway alignment and additional warning may be provided on the approach to a bridge or culvert by the use of object markers and/or delineators.

*Guidance:*

*03 The ONE LANE BRIDGE FOR TRUCKS AND BUSES (SR27-1(CA)) sign (see Figure 5C-2(CA)) should be used at the approaches to a bridge that is determined to be too narrow to allow trucks or buses in opposing directions to be on the bridge at the same time.*

**Section 5C.07 Hill Sign (W7-1)**

*Option:*

01 An engineering study of vehicles and road characteristics, such as percent grade and length of grade, may be conducted to determine hill signing requirements.

**Section 5C.08 PAVEMENT ENDS Sign (W8-3)**

*Option:*

01 A PAVEMENT ENDS (W8-3) sign (see Figure 5C-2) may be used to warn road users where a paved surface changes to a gravel or earth road surface.

**Section 5C.09 Vehicular Traffic Warning and Non-Vehicular Warning Signs (W11 Series and W8-6)**

*Guidance:*

01 *Vehicular Traffic Warning signs (see Figure 5C-2) should be used to alert road users to locations where frequent unexpected entries into the roadway by trucks, bicyclists, farm vehicles, fire trucks, and other vehicles might occur. Such signs should be used only at locations where the road user's sight distance is restricted or the condition, activity, or entering traffic would be unexpected.*

*Option:*

02 Non-Vehicular Warning signs (see Figure 5C-2) may be used to alert road users in advance of locations where unexpected entries into the roadway or shared use by pedestrians, large animals, or other crossing activities might occur.

03 A W7-3aP, W16-2P, or W16-9P supplemental plaque (see Figure 5C-2), with the legend NEXT XX MILES, XX FEET, or AHEAD may be installed below a Vehicular Traffic Warning or Non-Vehicular Warning sign (see Sections 2C.49 and 2C.50) to inform road users that they are approaching a portion of the roadway or a point where crossing activity might occur.

**Standard:**

04 **When a Non-Vehicular Warning sign is placed at the location of the crossing point, a diagonal downward pointing arrow (W16-7P) plaque (see Figure 5C-2) shall be mounted below the sign.**

*Guidance:*

05 *If the activity is seasonal or temporary, the sign should be removed or covered when the condition or activity does not exist.*

**Section 5C.10 Advisory Speed Plaque (W13-1P)**

*Option:*

01 An Advisory Speed (W13-1P) plaque (see Figure 5C-1) may be mounted below a warning sign when the condition requires a reduced speed.

**Section 5C.11 DEAD END or NO OUTLET Signs (W14-1, W14-1a, W14-2, W14-2a)**

*Option:*

01 The DEAD END (W14-1) and NO OUTLET (W14-2) signs (see Figure 5C-2) and the DEAD END (W14-1a) and NO OUTLET (W14-2a) signs (see Figure 5C-2) may be used to warn road users of a road that has no outlet or that terminates in a dead end or cul-de-sac.

*Guidance:*

02 *If used, these signs should be placed at a location that gives drivers of large commercial or recreational vehicles an opportunity to select a different route or turn around.*

### **Section 5C.12 NO TRAFFIC SIGNS Sign (W18-1)**

**Option:**

01 A W18-1 warning sign (see Figure 5C-2) with the legend NO TRAFFIC SIGNS may be used only on unpaved, low-volume roads to advise users that no signs are installed along the distance of the road. If used, the sign may be installed at the point where road users would enter the low-volume road or where, based on engineering judgment, the road user might need this information.

02 A W7-3aP, W16-2P, or W16-9P supplemental plaque (see Figure 5C-2) with the legend NEXT XX MILES, XX FEET, or AHEAD may be installed below the W18-1 sign when appropriate.

### **Section 5C.13 Other Warning Signs**

**Standard:**

01 **Other warning signs used on low-volume roads that are not discussed in Part 5, but are in this Manual, shall comply with the provisions contained in other Parts of this Manual. Warning signs that are not provided in this Manual shall comply with the provisions in Sections 2C.02 and 2C.03.**

### **Section 5C.14 Object Markers and Barricades**

**Support:**

01 The purpose of object markers is to mark obstructions located within or adjacent to the roadway, such as bridge abutments, drainage structures, and other physical objects.

**Guidance:**

02 *The end of a low-volume road should be marked with a Type 4 object marker in compliance with Section 2C.66.*

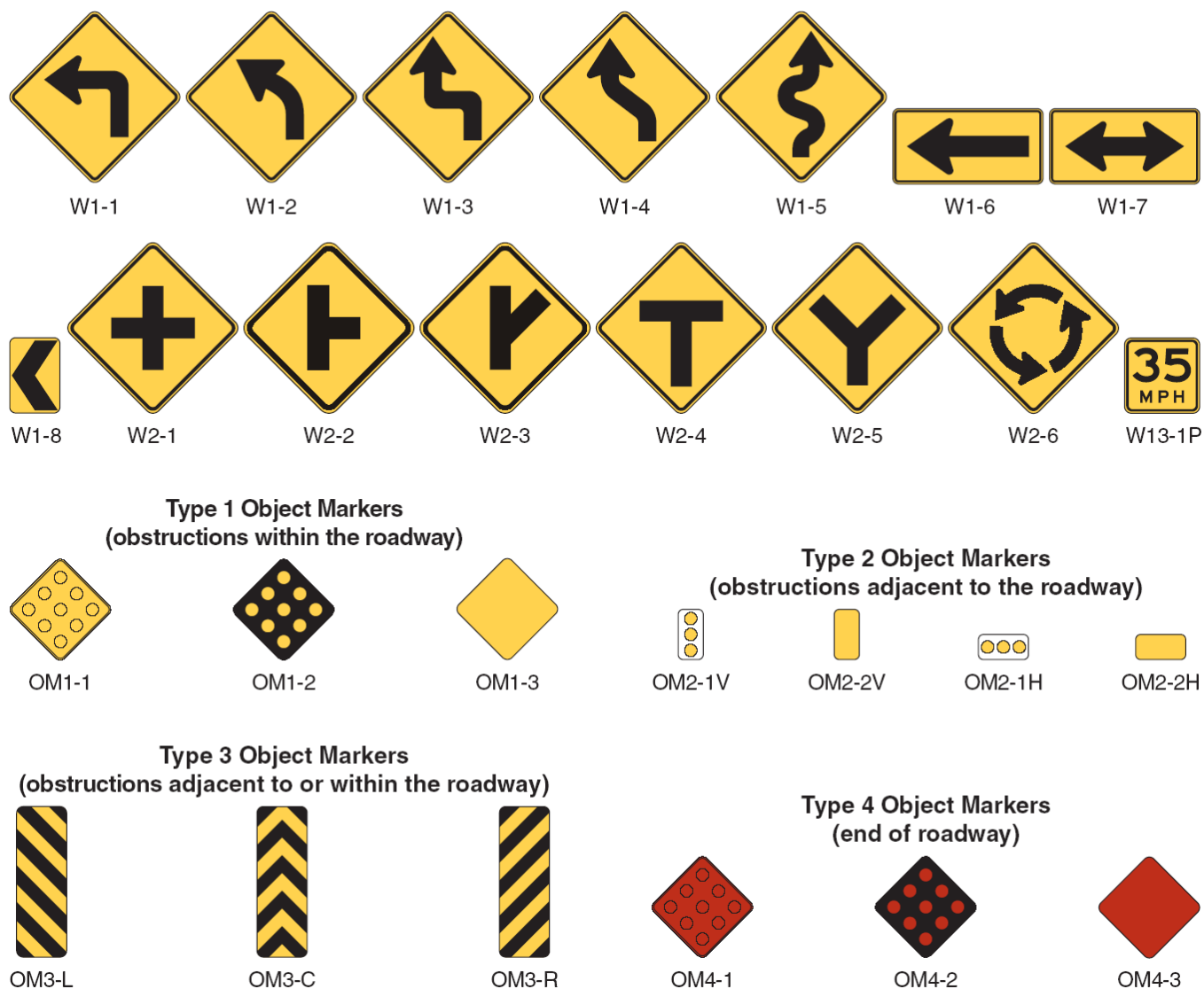
**Option:**

03 A Type 3 Barricade may be used where engineering studies or judgment indicates a need for a more visible end-of-roadway treatment (see Section 2B.67).

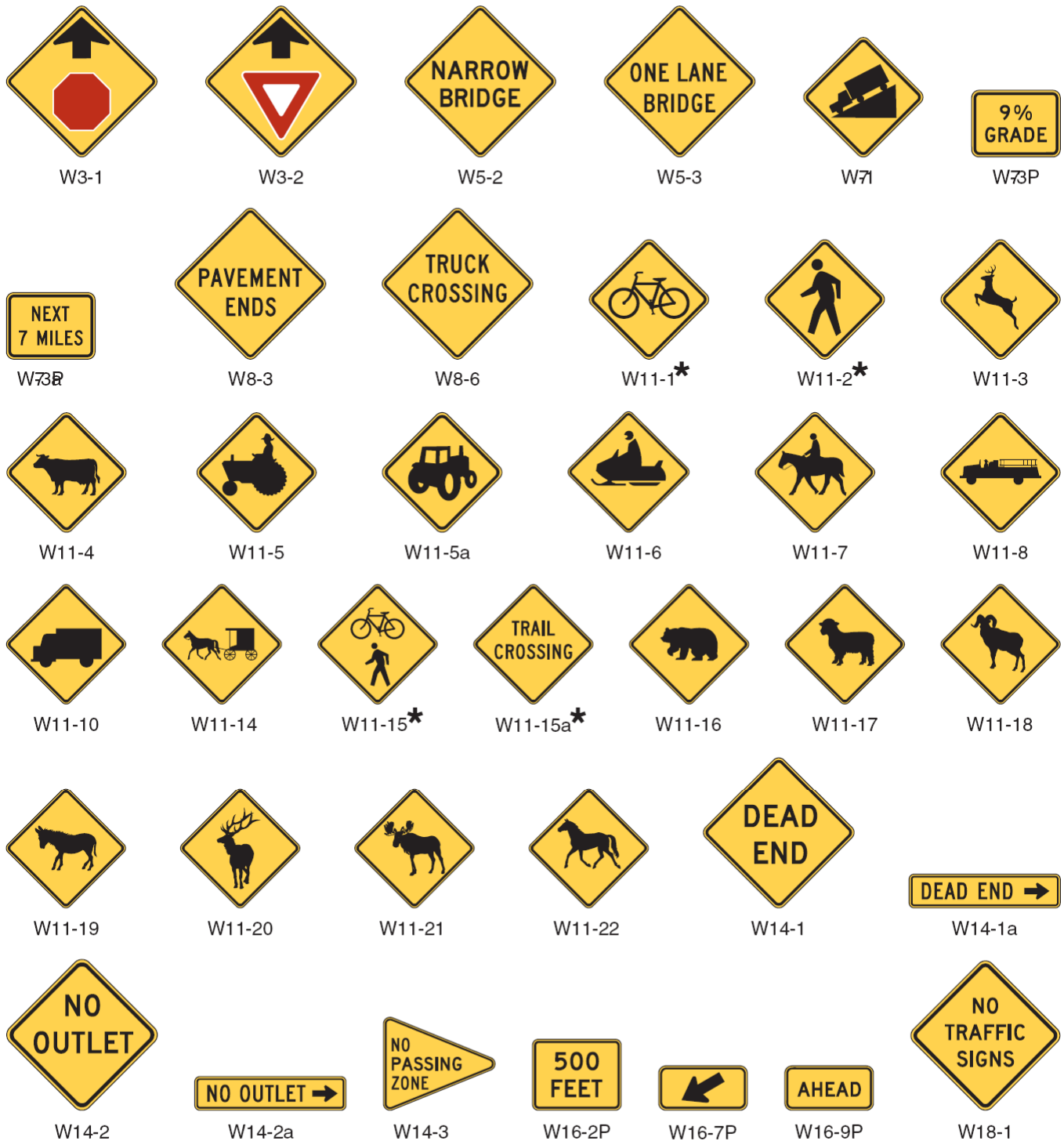
**Standard:**

04 **Barricades used on low-volume roads shall comply with the provisions contained in Section 2B.67.**

**Figure 5C-1. Horizontal Alignment and Intersection Warning Signs and Plaques and Object Markers on Low-Volume Roads**



**Figure 5C-2. Other Warning Signs and Plaques on Low-Volume Roads**



\* A fluorescent yellow-green background color may be used for this sign or plaque

***Figure 5C-2 (CA). Other Warning Signs and Plaques on Low-Volume Roads***



**SR27-1 (CA)**